

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Claims 1-5 (Cancelled).

6. (Currently Amended) A navigation apparatus for providing navigation services comprising:

a platform block including hardware of the navigation apparatus and basic functions for controlling the hardware;

a navigation application processing block for providing navigation services using the basic functions included in said platform block;

an optional application processing block for providing optional services using any of the navigation services[[,]] based on information acquired using the basic functions of said platform block; and

an interface processing block for communicating with said optional application processing block and said navigation application processing block to enable any of the optional services to be executed, wherein said optional application processing block and said interface processing block ~~is~~ are executed on a virtual platform-and, which is independent of executable on said platform block and another platform, said navigation and application processing block being implemented in a Native language of said platform block and being executed on said platform block.

Claims 7-10 (Cancelled).

11. (Previously Presented) The navigation apparatus according to claim 6, wherein said navigation application processing block executes any of the navigation services in accordance with navigation control data supplied from said optional application processing block via said interface processing block and supplies navigation

information data including one of an interim result and an execution result to said optional application processing block via said interface processing block.

12. (Previously Presented) The navigation apparatus according to claim 11, wherein said interface processing block generates, when the navigation control data from said optional application processing block is composite navigation control data, plural navigation control data sets from the composite navigation control data and supplies the plural navigation control data sets to said navigation application processing block.

Claim 13 (Cancelled).

14. (Original) The navigation apparatus according to claim 6, wherein said interface processing block communicates with said navigation application processing block using socket communication.

15. (Original) The navigation apparatus according to claim 6, wherein said interface processing block acquires a remote optional application processing block from an external source using the basic functions of said platform block.

16. (Original) The navigation apparatus according to claim 15, wherein said interface processing block acquires the remote optional application processing block from the external source only when a communication service used by the remote optional application processing block is available for use.

17. (Previously Presented) The navigation apparatus according to claim 15, wherein said interface processing block displays a menu of remote optional application processing blocks using the basic functions included in said platform block, adds to the menu the remote optional application processing block when the remote optional application processing block is acquired from the external source, and starts the acquired remote optional application processing block when selected through the menu.

18. (Previously Presented) The navigation apparatus according to claim 6, wherein

said optional application processing block supplies a request for communication services to said interface processing block, and

said interface processing block starts the communication services requested upon receipt of the request.

19. (Previously Presented) The navigation apparatus according to claim 18, wherein said interface processing block acquires a module for executing the communication services requested corresponding to the request when the module is not available.

20. (Previously Presented) The navigation apparatus according to claim 6, wherein said optional application processing block provides collection and delivery information services using any of the navigation services, based on information acquired from a center using the basic functions included in said platform block.

21. (New) A navigation apparatus for providing navigation services comprising:
a platform block including hardware of the navigation apparatus and basic functions for controlling the hardware;

a navigation application processing block for providing navigation services using the basic functions included in said platform block;

an optional application processing block for providing optional services using any of the navigation services, based on information acquired using the basic functions of said platform block; and

an interface processing block for communicating with said optional application processing block and said navigation application processing block to enable any of the optional services to be executed, wherein said optional application processing block and said interface processing block are written in a language for a virtual platform, which is

executable on said platform block and another platform, and are executed on said virtual platform, said navigation and application processing block being implemented in a Native language of said platform block and being executed on said platform block.

22. (New) The navigation apparatus according to claim 21, wherein said optional application processing block calls and executes the navigation services of said navigation application processing block via said interface processing block.

23. (New) The navigation apparatus according to claim 21, wherein said interface processing block includes shared variables read and written commonly, during processing, in an area where data is exchanged with said optional application processing block and, during processing, in an area where data is exchanged with said navigation application processing block, so that the data exchanged between said optional application processing block and said navigation application processing block is exchanged using the shared variables.